

Comparison of condition index in the green-lipped mussel *Perna viridis* between Sebatu and Pasir Panjang, Peninsular Malaysia

Abstract

The condition index (which relates to the tissue dry weight to shell volume) of the green-lipped mussel *Perna viridis* was investigated at Sebatu in Melaka and Pasir Panjang in Negri Sembilan from September 2003 to February 2004. Monthly samples of *P. viridis* were collected from culturing rafts at both sites. Variations in the average monthly condition index (CI) of *P. viridis* ranged from 21.06 to 26.72 g cm⁻³ and 15.18 to 19.41 g cm⁻³ in Sebatu and Pasir Panjang, respectively. Salinity values were lowest in November between 27.93 to 28.10 ppt in Sebatu and Pasir Panjang, respectively. Salinity then started increasing gradually until it reached 33.26 ppt in Sebatu and 31.23 ppt in Pasir Panjang in the month of February. Chlorophylla in Pasir Panjang showed higher fluctuation, ranging from 2.93 to 14.39 mg/L, while in Sebatu the fluctuations were lower and ranged between 7.70 and 9.37 mg l⁻¹. Rapid decline in CI values were recorded during January in Sebatu and February in Pasir Panjang. However, this rapid declining state of CI in *P. viridis* was an indication of its spawning period, when their gametes were released in the water column. These findings would help in the development of captive breeding techniques and mass seed production in aquaculture.

Keyword: Condition index; Mussel; *Perna viridis*; Spawning